

Myobrevin

Cat.No. 176 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 up to 1 : 5000 (AP staining) IP: not tested yet ICC: 1 : 1000 IHC: yes IHC-P/FFPE: 1 : 200
Immunogen	Recombinant protein corresponding to AA 1 to 70 from mouse Myobrevin (UniProt Id: Q9Z2P8)
Reactivity	Reacts with: mouse (Q9Z2P8). No signal: rat. Other species not tested yet.
Specificity	Specific for myobrevin. (K.O. verified)
matching control	176-0P

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Myobrevin, also known as **VAMP 5** belongs to the family of vesicle-associated membrane proteins and has a theoretical molecular weight of 11.4 kDa. Like other VAMP isoforms it is composed of an N-terminal cytoplasmic region and a C-terminal transmembrane domain. Vamp 5 is preferentially expressed in skeletal muscle and heart tissue and is upregulated during the differentiation of C2C12 cells into myotubes.

Selected References SYSY Antibodies

The localization of VAMP5 in skeletal and cardiac muscle.
Takahashi M, Tajika Y, Khairani AF, Ueno H, Murakami T, Yorifuji H
Histochemistry and cell biology (2013) 139(4): 573-82. **WB, IHC**

Loss of VAMP5 in mice results in duplication of the ureter and insufficient expansion of the lung.
Ikezawa M, Tajika Y, Ueno H, Murakami T, Inoue N, Yorifuji H
Developmental dynamics : an official publication of the American Association of Anatomists (2018) : **WB, IHC; KO verified; tested species: mouse**

Characterization of VAMP isoforms in 3T3-L1 adipocytes: implications for GLUT4 trafficking.
Sadler JB, Bryant NJ, Gould GW
Molecular biology of the cell (2015) 26(3): 530-6. **WB**

Effects of contraction on localization of GLUT4 and v-SNARE isoforms in rat skeletal muscle.
Rose AJ, Jeppesen J, Kiens B, Richter EA
American journal of physiology. Regulatory, integrative and comparative physiology (2009) 297(5): R1228-37. **WB**

Selected General References

VAMP5 and VAMP8 are most likely not involved in primary open-angle glaucoma.
Brinkman JF, Ottenheim CP, de Jong LA, Zegers RH, de Smet MD, de Jong PT, Bergen AA
Molecular vision (2005) 11: 582-6.

The cytoplasmic domain of Vamp4 and Vamp5 is responsible for their correct subcellular targeting: the N-terminal extension of VAMP4 contains a dominant autonomous targeting signal for the trans-Golgi network.
Zeng Q, Tran TT, Tan HX, Hong W
The Journal of biological chemistry (2003) 278(25): 23046-54.

A novel synaptobrevin/VAMP homologous protein (VAMP5) is increased during in vitro myogenesis and present in the plasma membrane.
Zeng Q, Subramaniam VN, Wong SH, Tang BL, Parton RG, Rea S, James DE, Hong W
Molecular biology of the cell (1998) 9(9): 2423-37.